UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,465	03/31/2004	Sanjeev Garg	CE10531R	8002

22917 7590 12/11/2008

MOTOROLA, INC.
1303 EAST ALGONQUIN ROAD
IL01/3RD
SCHAUMBURG, IL 60196

EXAMINER	
HERRERA, DIEGO D	
ART UNIT	PAPER NUMBER
2617	

NOTIFICATION DATE	DELIVERY MODE
12/11/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing.US@motorola.com

Office Action Summary	Application No.	Applicant(s)	
	10/814,465	GARG, SANJEEV	
	Examiner	Art Unit	
	DIEGO HERRERA	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 January 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/23/2008 has been entered.

Response to Amendment

Claims 1, 11, and 18, have been amended.

Response to Arguments

Applicant's arguments with respect to claim1-24 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang (US 6901268 B2), and in view of Usuda et al. (US 20030169707 A1).

Regarding claim 1. Chang discloses a method for reducing an erroneous frame classification associated with a communication in a radio access network (RAN) (abstract, col. 1 lines: 15-22, Chang teaches base station controller in communication network with mobile devices and base stations), the method comprising: classifying a first frame associated with the communication on a first channel having a first data rate (col. 7 lines: 54-67--col. 8 lines: 1-10, Chang teaches forward and reverse channels having SCH and FCH/DCCH and control of power, hence, controlling

frames with data indicators as to control of power) and classifying a second frame associated with the communication on a second channel having a second data rate (col. 7 lines: 54--col.8 lines:10, Chang teaches forward and reverse

links one skilled in the art knows that they are of different rates and classifying of frames is done independently to regulate rate and provide better QoS), wherein classifying includes classifying a Transmit/Discontinuous Transmit (TX/DTX) condition associated with each of the first frame and the second frame (col. 9 lines: 31-57, Chang teaches determining type of transmissions messages between first and second channels and their transmitted frames);

However, Chang does not discloses specifically wherein the first channel and the second channel are co-channels between a base station and a mobile station, nevertheless, the examiner maintains that this is well known in the art at the time the invention was made and taught by Usuda et al. (abstract, title, fig. 13, 14, ¶: 2, 21-25, 54, Usuda et al. teaches sharing of a channel by two channels, hence, co-channels). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made of Chang to specifically include first channel and the second channel are co-channels between base station and mobile terminal, as taught by Usuda et al. for the purposes of improving system capacity and communication quality. One of ordinary skilled in the art would be motivated and found it obvious to combine the teachings of Chang with the co-channel structure of Usuda et al. in order to gain the commonly understood benefits of such adaptation, i.e. resource conservation, power conservation, avoid interferences, improve capacity, and improve communication quality. Therefore, the combination is the adaptation of an old idea or invention (power control on channel) using newer technology that is commonly available and understood in the art (co-channels).

re-classifying the first frame from a first condition of the first frame to a second condition of the first frame based on the classifying the second frame of the second channel (fig. 4a-b, 13, 15-16, col. 9 lines: 31-57, col. 10 lines: 24-44, Chang teaches re-assigning the second channel and second frame to a second condition than the first received through first channel first frame), and wherein the first condition being a DTX condition (fig. 3, 4b, col. 1 lines: 24-50, col. 10, lines: 24-26, Chang teaches DTX condition detected when message is received), and the second condition being at least one of a TX condition or an erasure condition (col. 10 lines: 24-44, Chang teaches setting EIB on the reverse SCH when DTX mode is detected).

Regarding claim 11. Chang discloses a method for determining an erroneous frame condition associated with a wireless communication in a radio access network (RAN) (abstract, col. 1 lines: 15-22, Chang teaches base station controller in communication network with mobile devices and base stations), the method comprising:

determining a first parameter including one or more of: a Transmit/Discontinuous Transmit (TX/DTX) parameter (col. 1 lines: 24-30, 42-50, Chang teaches determination of parameter is that of a DTX), a first rate parameter, and a first quality parameter (col. 10 lines: 1-7, Chang teaches CRC to check quality and reverse link quality to check the reception strength of the reverse SCH frame), the first parameter associated with a first frame on a first channel having a first data rate; determining a second parameter including one or more of: a second TX/DTX parameter, a second rate parameter(col. 1 lines: 24-30, 42-50, col. 9-12,

Chang teaches determination of parameter is that of a DTX), a second quality parameter (col. 10 lines: 1-7, Chang teaches CRC to check quality and reverse link quality to check the reception strength of the reverse SCH frame), and a content parameter associated with a second frame on a second channel having a second data rate; and determining that a first condition associated with the first frame includes the erroneous condition and reclassifying the first condition associated with the first frame to a second condition associated with the first frame based on the second parameter associated with the second frame on the second channel (col. 10 lines: 24-44, Chang teaches setting EIB on the reverse SCH when DTX mode is detected), wherein the first data rate is greater than the second data rate(col. 12 lines: 11-23, Chang teaches controlling power level), However, Chang does not discloses specifically wherein the first channel and the second channel are co-channels between a base station and a mobile station, nevertheless, the examiner maintains that this is well known in the art at the time the invention was made and taught by Usuda et al. (abstract, title, fig. 13, 14, ¶: 2, 21-25, 54, Usuda et al. teaches sharing of a channel by two channels, hence, co-channels). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made of Chang to specifically include first channel and the second channel are co-channels between base station and mobile terminal, as taught by Usuda et al. for the purposes of improving system capacity and communication quality. One of ordinary skilled in the art would be motivated and found it obvious to combine the teachings of Chang with the co-channel structure of Usuda et al. in order to gain the commonly understood

benefits of such adaptation, i.e. resource conservation, power conservation, avoid interferences, improve capacity, and improve communication quality. Therefore, the combination is the adaptation of an old idea or invention (power control on channel) using newer technology that is commonly available and understood in the art (co-channels).

Regarding claim 18. Chang discloses an apparatus for reducing erroneous frame classifications associated with a communication with a radio access network (RAN) (abstract, col. 1 lines: 15-22, Chang teaches base station controller in communication network with mobile devices and base stations), the apparatus comprising:

an interface capable of supporting a portion of the communication on a first channel having a first data rate and a second channel having a second data rate less than the first data rate (abstract, col. 11 lines: 13-40, Wang teaches FCH/DCCH and SCH two channels having different rates of data);

However, Chang does not discloses specifically wherein the first channel and the second channel are co-channels between a base station and a mobile station, nevertheless, the examiner maintains that this is well known in the art at the time the invention was made and taught by Usuda et al. (abstract, title, fig. 13, 14, ¶: 2, 21-25, 54, Usuda et al. teaches sharing of a channel by two channels, hence, co-channels). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made of Chang to specifically include first channel and the second channel are co-channels between base station and mobile terminal, as taught by Usuda et al. for the purposes of improving system

capacity and communication quality. One of ordinary skilled in the art would be motivated and found it obvious to combine the teachings of Chang with the co-channel structure of Usuda et al. in order to gain the commonly understood benefits of such adaptation, i.e. resource conservation, power conservation, avoid interferences, improve capacity, and improve communication quality. Therefore, the combination is the adaptation of an old idea or invention (power control on channel) using newer technology that is commonly available and understood in the art (co-channels).

a memory (abstract, col. 1 lines: 16-22, Chang teaches base station controller, hence, memory component being part of station); and a processor coupled to the memory and the interface (abstract, col. 1 lines: 16-22, Chang teaches system hence processing power and components), the memory storing instructions for causing the processor to: determine a second parameter associated wherein the first classification condition associated with the first frame of the first channel is reclassified to a second classification condition based on the second parameter associated with the first frame on the second channel (fig. 3, 4b, col. 1 lines: 24-50, col. 10, lines: 24-26, Chang teaches DTX condition detected when message is received), and wherein an adjustment of a power level associated with the first channel is facilitated based on the re-classification (col. 12 lines: 11-23, Chang teaches controlling power level).

Consider claim 2. A method according to claim 1, further comprising: re-classifying the second frame from a first condition of the second frame to a second condition of the second frame associated with the communication based

on the classifying of the first frame .(.col. 10 lines: 24-44, Chang teaches setting EIB on the reverse SCH when DTX mode is detected.

Consider claim 3. A method according to claim 2, further comprising facilitating an adjustment of a power level associated with the second channel based on the re\- classifying the second frame (col. 10 lines: 24-44, Chang teaches setting EIB on the reverse SCH when DTX mode is detected, hence, power control based on second frame second channel).

Consider claim 4. A method according to claim 2, wherein the first condition of the second frame includes one or more of a rate parameter and a quality parameter and wherein the rate parameter includes a less than full rate value and the quality parameter includes a low quality value (col. 9 lines: 65--col.10 lines: 23, Chang teaches having FQI and reverse link quality to the reception strength of the reverse SCH frame).

Consider claim 5. A method according to claim 1, wherein the first channel includes one of a high capacity channel and a low reliability channel and the second channel includes, respectively, one of a low capacity channel and a high reliability channel (fig. 7, 9, 12, col. 9 lines: 65--col.10 lines: 23, Chang teaches having FCH/DCCH and SCH).

Consider claim 6. A method according to claim 1, wherein the RAN includes a cdma2000 RAN (col. 9 lines: 20-25, Chang teaches CDMA communication system RAN is inherently part of the system), and wherein the first channel includes a supplemental channel (SCH) and the second channel includes one of a fundamental channel (FCH) and a dedicated control channel (DCCH) (col. 10

lines: 24-44, Chang describes channels compose of FCH/DCCH and SCH).

Consider claim 7. A method according to claim 1, wherein the classifying the first frame includes classifying a Transmit/Discontinuous Transmit (TX/DTX) condition associated with the first frame (abstract, col. 10 lines: 50-67--col.11 lines: 1-12, Chang teaches getting information of channel classification of first frame having that of DTX otherwise TX).

Consider claim 8. A method according to claim 1, wherein the first condition of the first frame includes a Discontinuous Transmit (DTX) condition and the second condition of the first frame includes a Transmit (TX) condition (abstract, col. 10 lines: 50-67--col.11 lines: 1-12, Chang teaches getting information of channel classification of first frame having that of DTX otherwise TX meaning that the frame is good for transmission).

Consider claim 9. A method according to claim 7, wherein the second condition further includes an Erasure condition (col. 10 lines: 24-44, Chang teaches setting EIB on the reverse SCH when DTX mode is detected, hence, erasure is the second condition).

Consider claim 10. A method according to claim 1, further comprising facilitating an adjustment of a power level associated with the first channel based on the re-classifying the first frame (col. 10, Chang teaches adjusting power level associated based on first channel first frame classification).

Consider claim 12. A method according to claim 11, further comprising determining that a first condition associated with the second channel includes the erroneous condition and reclassifying the first condition associated with the

second channel to a second condition associated with the second channel based on the first parameter (col. 10 lines: 1-7, 24-44, Chang teaches determination of DTX mode and erroneous data, i.e. bad frame; col. 9-12, Chang teaches the process the changing the parameters to a second condition based on received information to adjust power level).

Consider claim 13. A method according to claim 12, further comprising facilitating an adjustment of a power level associated with the second channel based on the reclassifying the first condition associated with the second channel (col. 10 lines: 24-44, Chang teaches setting EIB on the reverse SCH when DTX mode is detected, hence, power control based on second frame second channel).

Consider claim 14. A method according to claim 11, wherein the first channel includes a high capacity channel and the second channel includes a low capacity channel (fig. 7, 9, 12, col. 9 lines: 65--col.10 lines: 23, Chang teaches having FCH/DCCH and SCH).

Consider claim 15. A method according to claim 11, wherein the RAN includes a cdma2000 RAN (col. 9 lines: 20-25, Chang teaches CDMA communication system RAN is inherently part of the system), and wherein the first channel includes a supplemental channel (SCH) and the second channel includes one of a fundamental channel (FCH) and a dedicated control channel (DCCH) (col. 10 lines: 24-44, Chang describes channels compose of FCH/DCCH and SCH).

Consider claim 16. A method according to claim 11, wherein, if the TX/DTX parameter is equal to DTX and at least one of the conditions of: the rate

parameter includes a value greater than a lowest rate value, the quality parameter indicates a good frame, and the content parameter indicates bearer data is satisfied (abstract, col. 10 lines: 50- 67--col.11 lines: 1-12, Chang teaches getting information of channel classification of first frame having that of DTX otherwise TX meaning that the frame is good for transmission), then the re-classifying the first condition associated with the first frame to a second condition associated with the first frame includes the first condition where the TX/DTX parameter is equal to DTX and the second condition where TX/DTX parameter is equal to TX and the quality parameter is an erasure (col. 10, Chang teaches first and second condition that of DTX and erasure and TX).

Consider claim 17. A method according to claim 11, further comprising facilitating an adjustment of a power level associated with the first channel based on the re-classifying the first condition associated with the first frame (col. 10, Chang teaches adjusting power level associated based on first channel first frame classification).

Consider claim 19. An apparatus according to claim 18, wherein the instructions further cause the processor to: determine a first parameter associated with the first frame on the first channel; and determine that a first classification condition associated with the first frame on the second channel is erroneous (col. 10 lines: 1-7, 24-44, Chang teaches determination of DTX mode and erroneous data, i.e. bad frame), wherein the first classification condition associated with the first frame on the second channel is reclassified to a second classification condition based on the first parameter and an adjustment of a power level associated with

the second channel is facilitated based on the re- classification (col. 9-12, Chang teaches the process the changing the parameters to a second condition based on received information to adjust power level).

Consider claim 20. An apparatus according to claim 18, wherein the first channel includes a high capacity channel and the second channel includes a low capacity channel (fig. 7, 9, 12, col. 9 lines: 65--col.10 lines: 23, Chang teaches having FCH/DCCH and SCH).

Consider claim 21. An apparatus according to claim 18, wherein the RAN includes a cdma2000 RAN (col. 9 lines: 20-25, Chang teaches CDMA communication system RAN is inherently part of the system), and wherein the first channel includes a supplemental channel (SCH) and the second channel includes one of a fundamental channel (FCH) and a dedicated control channel (DCCH) (col. 10 lines: 24-44, Chang describes channels compose of FCH/DCCH and SCH).

Consider claim 22. An apparatus according to claim 18, wherein the first classification condition includes one of an first erasure condition and a discontinuous transmit (DTX) condition and the second classification condition includes, respectively, one of a discontinuous transmit (DTX) condition and a second erasure condition (col. 9-12, Chang teaches DTX first condition and erasure/idle/null and changing to second condition to erasure/idle/null and DTX).

Consider claim 23. The apparatus according to claim 18, used in a mobile station wherein the interface is capable of coupling the mobile station and the RAN and supporting a downlink portion of the communication on the first channel

and the second channel (abstract, col. 9-11, Chang teaches use of uplink and downlink or forward and reverse channel communication in CDMA system, hence, components for support of wireless communication elements).

Consider claim 24. The apparatus according to claim 18 used in a base station wherein the interface is capable of coupling the base station and a Mobile Station (MS) associated with the RAN, the interface capable of supporting an uplink portion of the communication on the first channel and the second channel (abstract, col. 9-11, Chang teaches use of uplink and downlink or forward and reverse channel communication in CDMA system, hence, components for support of wireless communication elements).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIEGO HERRERA whose telephone number is (571)272-0907. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Diego Herrera/

Examiner, Art Unit 2617

/Lester Kincaid/

Supervisory Patent Examiner, Art Unit 2617